

## **AMENDMENTS IN THE SPECIFICATION:**

**Please amend the abstract of the disclosure as follows:**

~~In a coefficient update method for a time domain equalizer of a DMT system, an optimum coefficient is obtained even during a data period. The processing volume for the coefficient update is also decreased. A~~ In a discrete multitone modulation (DMT system), a coefficient of a time domain equalizer (TEQ) ~~the TEQ 32~~ is updated by an ~~the~~ output of the time domain equalizer ~~(TEQ 32) of the DMT system~~. Because of this, the transient of the sync signal where a cyclic prefix is added during the data period can be removed, so the coefficient of the TEQ can be accurately updated even if sync symbols are used. ~~Therefore~~ As a result, the coefficient of the TEQ is updated ~~even~~ during data communication as well as during training communication, so the coefficient of the TEQ 32 can be continually updated according to the change in the channel characteristics ~~even for a channel where the characteristics change~~. Since ~~the output of the FFT (36) such that processing volumes for a Fast Fourier Transform (FFT) unit on the main path at a subsequent stage of the TEQ (32) is used, the processing volume of the FFT for the coefficient correction processing can be decreased.~~